

Energy Policy WA

Level 1, 66 St Georges Terrace

Perth, WA 6000

Lodged via email: energymarkets@deed.wa.gov.au

### **RE: Outcomes of the Essential System Services Framework Review**

Neoen welcomes the opportunity to provide a submission on the Outcomes of the Essential System Services Framework Review.

As you may be aware, Neoen is a specialist, independent power producer with a long-term vision to deliver renewable, competitively priced and sustainable energy at scale. With 8.5 GW in operation or under construction globally, we are targeting a further 10 GW by 2030. In Western Australia, our flagship 560 MW Collie Battery recently commissioned its second stage, and we continue to progress a significant pipeline of renewable generation and storage projects in the SWIS.

We appreciate Energy Policy WA's work in assessing the evolving requirements of system services as the SWIS transitions. Neoen considers that BESS assets continue to be underutilised in the SWIS and remains ready to work with EPWA to ensure WA consumers receive the best possible outcomes. Our comments on specific elements of the review are provided below:

#### **1. Regulation Services**

We note an underlying assumption in the paper that Regulation Service requirements may be reduced by relying on Mandatory Primary Frequency Response (MPFR). While we support a more evidence-based approach to Regulation Service quantification, it is essential to recognise the distinct nature and value of Regulation Services compared with MPFR. Regulation Services are intended to reduce reliance on MPFR, thereby preserving headroom for managing mild disturbances and supporting contingency events. If MPFR headroom is consumed undertaking regulation duty, the system may face reduced ability to arrest short-term frequency deviations and increased RoCoF due to diminished MPFR and contingency headroom. A reduction in Regulation Service procurement could therefore create unintended system security consequences. We also highlight that the increasing entry of ESR facilities creates the potential for "volume-discount" market effects; even if more Regulation Services are required, competitive tension should remain strong.

#### **2. RoCoF Control Services**

We support a review of how ESR/BESS facilities contribute to RoCoF management. Following more than 12 months of performance from Collie\_ESR1 and four months from Collie\_BESS2 from Neoen as well as several other ESR facilities across the SWIS, we suggest incorporating recent system events into the analysis to reflect current system conditions. We also support greater transparency in the DCFM process and consider that more granular performance factors should be applied to facilities where modelling approaches are simplified. Importantly, the absence of recent frequency limit breaches should not be interpreted as evidence that service levels can be reduced. The Frequency Operating Standards and performance standards define boundary conditions—extremes that should not be approached routinely.

**3. Increasing the ROCOF Safe Limit**

We support this proposal.

**4. MPFR Monitoring**

We have no strong view on the proposed changes but consider that improved understanding of MPFR behaviour—and reduced discounting of its contribution—will support more efficient market outcomes. However, as noted above, MPFR should not be treated as a substitute for appropriate levels of Regulation Service procurement.

**5. Synthetic Inertia**

We suggest that analysis consider system performance with both grid-following and grid-forming BESS. While grid-forming technology offers enhanced controllability and system strength benefits, fast-responding grid-following BESS have already demonstrated substantial value in limiting frequency excursions during contingency events.

Neoen agree that adding approximately 2,400 MW·s of inertia would clearly benefit the market and could be delivered with N-1 redundancy at existing Neoen facilities in the SWIS. Pricing would remain competitive as there are several alternative batteries in the SWIS. Grid Forming Batteries would also provide existing services much greater than just inertia, we can also utilise the short term overload capability to provide a fault current contribution, which improves the short circuit contribution at the connection point. However, conversion to grid-forming operation remains a significant undertaking, and generators and developers would require a medium- to long-term, fixed-price contract to underwrite the investment and ensure reliable delivery of this service.

As an alternative pathway, EPWA could consider introducing a Fast Frequency Response service, which may enable an increased RoCoF limit and achieve similar system benefits with lower complexity. The relationship between required inertia and very fast frequency response is already utilised in dispatch equations in the NEM. Alternatively simply introducing a faster frequency service would not require a fixed term contract for generators. Neoen disagrees with the commentary in the report suggesting that the WEM is too shallow for such a service. If the fast frequency was co-optimised with the existing RoCoF from the synchronous generation fleet, most units in the WEM could participate.

We look forward to engaging with EPWA and other relevant stakeholders further on these initiatives. For further clarification please contact Max Collins, [max.collins@neoen.com](mailto:max.collins@neoen.com) in the first instance.